

What is claimed is:

1. A method for providing location information in a Global Positioning System (GPS) server, comprising the steps  
5 of:

a) receiving coordinates of current location of a GPS terminal and a request for location information which includes coordinates of geographical features adjacent to the GPS terminal from the GPS terminal;

10 b) generating location information having coordinates of the geographical features adjacent to the GPS terminal; and

c) transmitting the location information to the GPS terminal.

15 2. The method as recited in claim 1, wherein the geographical features include roads and buildings.

3. The method as recited in claim 1, wherein the coordinate of the geographical feature includes a difference  
20 value between the coordinate of the GPS terminal and the coordinate of the geographical feature.

4. A method for providing location information in a Global Positioning System (GPS) server, comprising the steps  
25 of:

a) receiving coordinates of current location of a GPS terminal from the GPS terminal;

13                   b) generating basic location information which includes coordinates of main geographical features adjacent to a GPS terminal in response to a request for basic location information from the GPS terminal;

5                   c) transmitting the basic location information to the GPS terminal;

10                   d) generating additional location information which includes coordinates of detailed geographical features adjacent to the GPS terminal in response to a request for additional location information from the GPS terminal; and

15                   e) transmitting the additional location information to the GPS terminal.

5. The method as recited in claim 4, wherein the main geographical features include location of main buildings, figure of main buildings, location of main roads and figure of main roads.

20                   6. The method as recited in claim 4, wherein the detailed geographical features include location of buildings, figure of buildings, location of roads and figure of roads.

25                   7. A method for providing location information in a Global Positioning System (GPS) terminal, comprising the steps of:

                  a) requesting location information which includes coordinates of geographical features adjacent to the GPS

terminal by transmitting coordinates of current location to a GPS server;

b) receiving location information having coordinates of the geographical features adjacent to the GPS terminal; and

5 c) generating graphical location information based on the location information.

8. The method recited in claim 7, wherein the geographical features include location of buildings, figure of 10 buildings, location of roads and figure of roads.

9. A method for providing location information in a Global Positioning System (GPS) terminal, comprising the steps of:

15 a) requesting basic location information which includes coordinates of main geographical features adjacent to the GPS terminal and transmitting coordinates of current location to a GPS server;

b) receiving the basic location information having main 20 geographical features adjacent to the GPS terminal from the GPS server;

c) outputting graphical basic location information on a display unit;

d) requesting additional location information which 25 includes coordinates of detailed geographical features adjacent to the GPS terminal;

e) receiving the additional location information from the

GPS server; and

f) outputting graphical additional location information to the display unit.

5 10. The method as recited in claim 9, wherein the main geographical features include location of main roads, figure of main roads, location of main buildings and figure of main buildings.

10 11. The method as recited in claim 9, wherein the detailed geographical features include location of roads, figure of roads, location of buildings and figure of buildings.

15 12. The method as recited in claim 8, wherein the coordinate of the main geographical feature includes a difference value between the coordinate of the GPS terminal and the coordinate of the geographical feature.

20 13. A mobile communication system for providing location information, comprising:

a GPS server for receiving the coordinates of current location of a GPS mobile terminal, generating location information which includes coordinates of geographical features adjacent to the GPS terminal through retrieval of map data base, and transmitting the location information to the GPS terminal; and

at least one GPS terminal for transmitting coordinates of

its current location, requesting the location information to the GPS server, receiving the location information from the GPS server, generating graphical location information based on the location information, and displaying the graphical location information.

5

**14. The mobile communication system recited in claim 13, wherein the geographical features include roads and buildings.**

10

15. A GPS server for providing location information, comprising:

a receiver for receiving a location information request message and coordinates of the current location of a GPS terminal from a GPS terminal;

15

a map database for storing map information;

a transmitter for transmitting coordinates of geographical features adjacent to the GPS terminal; and

a processor for retrieving the map database based on the coordinates of the current location of the GPS terminal.

20

16. The GPS terminal recited claim 16, wherein the geographical features include roads and buildings.

25

17. A GPS terminal for providing location information, comprising:

a GPS receiver for receiving a GPS signal from GPS satellites;

a GPS processor for calculating coordinates of the current location of the GPS terminal using the GPS signal;

a transmitter for transmitting a location information request message and coordinates of the current location of the  
5 GPS terminal;

a receiver for receiving coordinates of geographical features adjacent to the GPS terminal from the GPS server; and

a location information processor for generating graphical location information based on the coordinates of geographical  
10 features and displaying the graphical location information.

18. The GPS terminal recited claim 16, wherein the geographical features include roads and buildings.